CLAIMS

We claim:

- 1. A power controller having quadrant modes based upon an input voltage and an error circuit output, whereby a positive input voltage will determine that either Quadrant I or Quadrant II will be employed, and whereby a negative input voltage will determine that either Quadrant III or Quadrant IV will be employed; wherein selection of Quadrant I vs. Quadrant II or Quadrant III vs. Quadrant IV is dependent upon the error circuitry.
- 2. The power controller of claim 1 wherein the error circuitry compares output voltage to a reference and determines both the required direction of current flow and the required amount of modulation by way of an error amplitude output to maintain controller output regulation.
- 3. The power controller of claim 1 further comprising a capacitor connected across an output and a return of the controller whereby the combination of controller and capacitor functions as a variable capacitor.
- 4. The power controller of claim 1 further comprising an inductor connected across an output and a return of the controller whereby the combination of controller and inductor functions as a variable inductor.